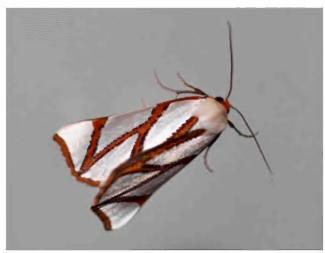
Castlemaine Naturalist

May 2024

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Monthly newsletter of the Castlemaine Field Naturalists Club Inc.



Clara's Satin Moth, *Thalaina clara Photo: Cathrine Harboe-Ree*

Evergreen and Entwisleia: a botanical life, and a seaweed

Peter Turner

Professor Tim Entwisle, the distinguished guest speaker at our April meeting, attracted a large and appreciative audience to hear about his life as a botanist, science communicator and director of the Sydney and Melbourne Royal Botanic Gardens and senior manager at Kew Botanic Gardens. Tim Entwisle's final two years at school were spent here in Castlemaine, where his teachers included Ern Perkins and George Broadway. His first year at University of Melbourne was focussed on Physics, Chemistry and Maths, but included Botany as a "filler" – and he was hooked into plants, and later, freshwater algae.

Many scientists who become leaders in their specialised fields remain focussed on their research; some scientists move into management of universities or scientific institutions and leave research; a few become outstanding science communicators. Tim Entwisle is one of those exceptional scientists who has through his working life



Tim the science communicator

woven all three strands together. His research on freshwater algae is recognised internationally, his appointments manage major to botanic gardens demonstrated outstanding leadership skills, and from his graduate student days he has talked about science on radio, written for newspapers and more recently several books, including the recent memoir "Evergreen: the Botanical Life of a Plant Punk" which was the basis for his talk, and has been consulted in preparing this report.

During his years as a research student, and ongoing research on freshwater algae, Tim identified a large number of new endemic Australian species, and was able to compare these with freshwater algae in many countries, developing strong collaborative links and friendships with the limited number of experts in this field. He was particularly pleased with the Batrachospermum species that under the microscope resemble long filamentous bottle brushes. So when his former supervisor and mentor Gary Kraft's team identified an extremely rare new species of alga south of Hobart that showed similar appearance to Batrachospermum but is totally unrelated, it was named Entwisleia bella, and placed in its own family, Entwisleiaceae and order Entwisleiales. Tim argued – with a wry smile – that it is both rarer and more evolutionarily significant than the Wollemi Pine.

While some people regard botanic gardens as unnatural constructs, botanic gardens are not recreations of "natural" nature, but places for scientific research, plant collection and conservation, culture and education; in Tim Entwisle's early view, "an inspiring landscape of documented plant collections, where every plant and setting has a purpose" - for science, conservation, learning, culture. As he visited more botanic gardens in many countries over the years, working in three famous ones in various roles including director in Melbourne and Sydney, Tim realised that "a botanic garden is at its best when it expresses a heady mix of nature, science and culture" and also health. He ends his book with the idea that "Perhaps we should reclaim the name physic garden and posit botanic gardens as a cure for the world's ills".

Our thanks to Tim Entwisle for a memorable talk, and for the following pictures of the Batrachospermum he found in a stream at Melaleuca. SW Tasmania.



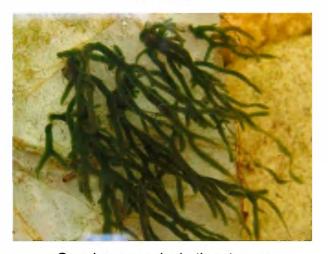
The stream at Melaleuca



Under the microscope



In the hand



Growing on rocks in the stream

April Excursion - "Signficant Trees in the Castlemaine Botanical Gardens"

Jenny Rolland with photos by Lou Citroen

On a glorious autumn afternoon, a large group of CFNC members and friends gathered near the Rose Garden in the Castlemaine Botanical Gardens for a walk to remember and celebrate founding club member George Broadway who died in January this year. The day would have been George's 90th birthday. George made an enormous contribution to the club in so many ways (see <u>February "Castlemaine Naturalist"</u>). One of his legacies was the production of the wonderful brochure "Significant Trees in the Castlemaine Botanical Gardens". This brochure is available

on our website and describes a walk around the gardens to view trees placed on the State Register of Significant Trees by the National Trust. The trees are numbered with metal tags. George prepared a map for his route around the gardens and compiled succinct, fascinating historical and/or botanical facts for the "Significant" as well as many other trees in the gardens.



Peter Turner and Euan Moore led the group on the walk, pausing to highlight particular trees for attention. There is an interesting collection of pine species in the gardens and the group first went over to an apparently insignificant "bush" near a larger Bhutan Cypress – this "bush" was in fact a Plum Pine (*Podocarpus elatus*). Rather than a cone, this pine bears a single seed that resembles a small plum.

We then walked around Lake Joanna, noting recent plantings of Bald (or Swamp) Cypress (*Taxodium*



The cones of a more recently planted Bald (Swamp)
Cypress showing autumn colours developing.

distichum), one of the relatively few deciduous pine species. At the southern end of the lake the was impressive Indian Bean Tree (Catalpa bignonioides) that George selected for the cover of his brochure. This tree looks spectacular when in flower in

the springtime. A nearby younger specimen of the Bean Tree displayed long bean-shaped seed pods.



The long seed pods (beans) of one of the Indian Bean Trees.

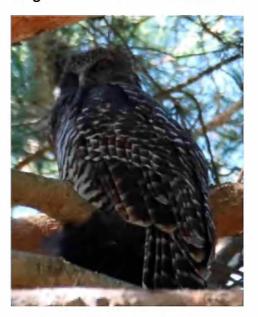
Of interest moving back north from the lake was the large old River Red Gum (*Eucalyptus camaldulensis*), the only remaining tree in the gardens that predates European arrival. We also admired several specimens of Cork Oak (*Quercus suber*) with their distinctive cork bark texture.

Returning to the pine theme, Euan paused at a large specimen of Monterey Pine (*Pinus radiata*), explaining that although this species is widely cultivated in plantations around the world for its timber and being recognised as an environmental weed in Australia, its population is decreasing in its native range on the Central Coast of

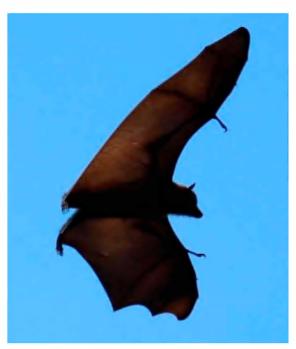
California and Mexico where its conservation status is "Endangered".

On our walk, there was also time to learn about the trees that provided regular roosting and nesting sites for birds, especially the Powerful Owls which didn't disappoint. We also reflected on the recent arrival of a rapidly increasing population of Greyheaded Flying Foxes (*Pteropus poliocephalus*), also seen in several other gardens around the state (see ABC Ballarat article).

We were very pleased that Phee Broadway and daughter Prue as well as Rita Mills, a fellow founding member of the club, were able to join us for the celebration. We thank George for his many contributions including raising awareness of the many values of Botanical Gardens such as in Castlemaine, as reinforced by Tim Entwisle in his talk to us the previous evening.



One of the pair of Powerful Owls in the gardens.



Grey-headed Flying Fox – one of the many thousands that have taken up residence in the Gardens.



Our group is dwarfed by the magnificent Aleppo Pine (*Pinus halipensis*)!

Grafted Trees of Cultural Significance

Cathrine Harboe-Ree

In addition to the many scar trees located in this region, there are several trees that are culturally significant to the Dja Dja Wurrung people, of the type variously called grafted, strap or strapped, ring, marker, signal or boundary trees, depending on their known or assumed significance and purpose. Wherever these trees occur, it is often not possible to know whether the fusing in these trees is naturally formed or manmade, unless local Indigenous people have knowledge that has been passed down through the generations, but this does not affect their cultural significance.

According to local Indigenous elder Uncle Rick Nelson, the two most significant grafted trees in our region are at Hamilton's Crossing, Baringhup West and Merin Merin Swamp. Both of these trees are River Red Gum, which across South-East Australia is the most common species of grafted tree.

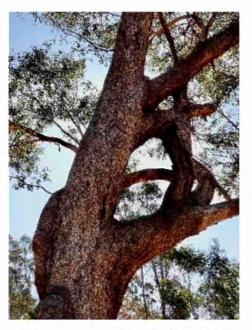


This beautiful ancient, grafted tree at Hamilton's Crossing is several kilometers downstream from the site of the former Neereman Aboriginal Protectorate (1840-41), which is on private land.

This ancient, grafted tree is on the edge of Merin Merin Swamp. *Photo:* Barry Golding (see web address below).



According to the local Dhudhuroa people, this tree from Everton Upper is a Boundary Tree, so called because it marks a boundary to an area that can only be used by women.



It is unknown if this Grey Box in Sandy Creek Rd Maldon is culturally significant; Uncle Rick is not aware of it.



And this Ring Tree in Mansfield is thought by the local Taungurung people to signify a burial site.

For further information see:

https://www.youtube.com/watch?v=qmfhOxb2pAM

https://www.youtube.com/watch?v=ERIkKIORQ98&t=2s

https://barrygoanna.com/2020/05/27/peaks-wetlands-rivers-2020-tour-notes/

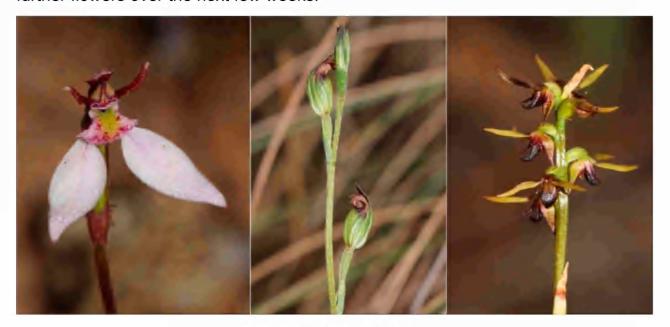
https://robertscholes.wordpress.com/2019/11/26/ring-trees-of-kooyoora/

https://theconversation.com/the-ring-trees-of-victorias-watti-watti-people-are-an-extraordinary-part-of-our-heritage-91310

Photos by Cathrine Harboe-Ree except where indicated.

Maldon Orchids by Russell Stanley

A few species of orchids were starting to appear around Maldon when I visited on April 17th. Most numerous were the 'Parson's Bands' or 'Bunny Orchids' – *Eriochilus sp.* (left photo). I also encountered a few Red-Tipped Greenhoods *Pterostylis rubescens* (centre photo), with several more emerging. Midge Orchids were scarce, with only a couple of flowering plants of the Dark Midge Orchid *Corunastylis occidua* ms (right photo) observed, though many leaves were in evidence with the promise of further flowers over the next few weeks.



Photos by Russell Stanley

Observations

Geoff Harris - Following on from Geraldine's report of a Noisy Friarbird at their property last month, Geoff reported that there are now lots of Noisy Friarbirds there.

Jill Williams



Pied Lacewing, Porismus strigatus



Green Grass-Dart, Ocybadistes walkeri

Jill Williams (cont.)



Common Grass-Blue, Zizina otis ssp. labradus



Bardi Moth, Abantiades atripalpis

In typical fashion, this large moth came banging on Jill's windows after recent heavy rain and when it settled, didn't waste time before it laid its eggs.



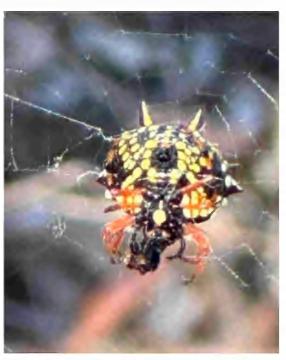
Grey-headed Flying Foxes massing in the cypresses in the Castlemaine Botanical Gardens. *Photo: Peter Turner*



Flame Robin. Mt Macedon. *Photo: Phil Hopley*



Imperial Hairstreak (*Jalmenus evagoras*) lays her eggs – the beginning of a story. *Photo: Mez Woodward*



Austracantha, a genus of spider with a single species, *Austracantha minax*, commonly known as the jewel spider.

Maldon Historic Reserve. *Photo: Phil Hopley*





Dainty Swallowtail (*Papilio anactus*) caterpillars commonly found on cultivated citrus as here in Judith's garden. *Photos: Judith Nimmo*

FROM THE COMMITTEE

We were very pleased to welcome a good number of visitors to the April meeting on 12 April and the excursion at the Botanical Gardens on the following day. It was especially pleasing to be able to commemorate George Broadway's contribution to the Club and his great love of the Botanical Gardens, and to spend time with Phee and their daughter Prue, on what would have been George's 90th birthday.

Early planning for our 50th anniversary in 2026 is underway. SEANA (the South East Australian Naturalists' Association) has accepted our offer to host the combined meeting in Castlemaine in the spring of 2026 to mark our anniversary.

Ticking away in the background, Committee members are finalising content for a revised "Indigenous Plants of Castlemaine and Surrounds" brochure, with very generous financial assistance from The Good Op Shop, the Wettenhall Environment Trust and FOBIF (the Friends of the Box Ironbark Forests). Also in train, with the help of several Club members, is a new "Native Street Trees of Castlemaine" brochure and database. The database will allow searching by street or species. We also welcome the offer of other members who have volunteered to help with archiving documents. This is a parallel process to the work being done by the Biodiversity Heritage Library (BHL) to digitise our past newsletters. Also thanks to BHL, we should soon have online a Club Wikipedia page.

Please note: Membership fees are now overdue. Subscription categories are on the back page and Membership forms are on the CFNC website.

Cathrine Harboe-Ree, Secretary, CFNC

COMING EVENTS

MONTHLY MEETING: Friday 10th May, 7.30pm

Uniting Church Fellowship Room, Lyttleton St.

"Native trees and their benefits during climate change"

Speaker: Dr Greg Moore (Uni Melbourne)

Our guest speaker for May will be Dr Greg Moore, Senior Research Associate, School of Ecosystem and Forest Sciences, The University of Melbourne. Greg specialises in arboriculture. He introduces his talk to us as follows: "Climate change will place new and extra demands on trees growing on both public and private land. There will be a need for increased canopy cover if cities and towns are to cope with a warming climate. While we expect a great deal of trees growing in public places, few of our native species have been investigated for their performance in our streets and parks. Yellow gum, *Eucalyptus leucoxylon*, is a species that can perform well in public places in Victoria."

Observations: Members and visitors are invited to share their interesting observations at the meeting. Please email any photos to illustrate your report as JPEG file(s) to Jill Williams (jilliwill33@gmail.com) by noon on the day of the meeting.

EXCURSION: Saturday 11th May, 1.30pm

"Coliban Channel walk, Taradale"

Leaders: Euan Moore, Jenny Rolland

Our May excursion will be along the Coliban Channel starting at the historic outlet of the Back Creek Syphon. We will follow the route described in "Castlemaine Bird Walks" by club member Damian Kelly. As well as birds, we hope to see some early flowers as plants respond to recent rainfall. The walk is mainly flat and easy going with a few gentle slopes.

Meet: 1.30pm at the Octopus (opposite the Castle Motel in Duke St) or **1.45pm** at Taradale (outside the service station).

Bring: Water, snacks, **clean** sturdy shoes, binoculars (if you have some), chairs and afternoon tea.

ROADSIDE CLEAN-UP: Monday 13th May, 9am Help keep our stretch of the Pyrenees Highway clean!

- Meet 9am near Tait's Decorative Iron, corner of Willy Milly Rd and Pyrenees Highway.
- Garbage bags and safety vests supplied. Wear sturdy footwear and bring your own gloves and water.

Please contact Geoff Harris (mob 0418 392 183) if you can help with the clean-up.

Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club.

Castlemaine Field Naturalists Club PROGRAM

Monthly meetings commence at 7.30pm and are held in the Uniting Church Hall (UCH), Lyttleton Street, Castlemaine except during winter (June-August) when they are held by Zoom.

Members and visitors are invited to share their interesting observations at these meetings. Please email any photos to illustrate your report as JPEG file(s) to Jill Williams (jilliwill33@gmail.com) by noon on the day of the meeting.

Excursions (Saturday following the monthly meeting) leave from the car park opposite the Castle Motel, Duke Street at 1.30pm unless stated otherwise.

See 'Coming Events' page for more details about May events.

Fri May 10th, Meeting 7.30pm (UCH). Guest speaker: Dr Greg Moore (Uni Melbourne) "Native trees and their benefits during climate change"

Sat May 11th, Excursion 1.30pm "Coliban Channel walk, Taradale". Leaders: Euan Moore, Jenny Rolland.

Mon May 13th, Roadside Clean-up 9am.

Fri June 14th, Meeting 7.30pm (by Zoom). Dr Don Fletcher (Threatened Species Recovery Hub) "Rosenberg's Goanna".

VISITORS ARE WELCOME AT CLUB ACTIVITIES

Castlemaine Naturalist - email newsletter material to: newsletter.cfnc@gmail.com * Deadline for the June edition: 31st May

Subscriptions (Membership forms on CFNC website, fees due by 1st April)

Ordinary membership: Single \$35, Family \$50 Pensioner or student: Single \$25, Family \$30

Subscription includes the monthly newsletter, Castlemaine Naturalist.

Committee

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Secretary: Cathrine Harboe-Ree

Treasurer: Geoff Harris

Committee: Lou Citroen Jenny Rolland Peter Turner

Jill Williams Noel Young

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